

United States District Court  
District of Massachusetts

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CARDIAQ VALVE TECHNOLOGIES, INC., )  
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Plaintiff,                          )  
  )  
  ) Civil Action No.  
v.                                    )  
  ) 14-12405-NMG  
  )  
NEOVASC, INC. and                  )  
NEOVASC TIARA, INC.,              )  
  )  
Defendants.                          )  
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MEMORANDUM & ORDER

GORTON, J.

This case arises out of an alleged misuse of confidential information belonging to plaintiff CardiaQ Valve Technologies, Inc. ("CardiaQ") with respect to a prosthetic heart mitral valve. CardiaQ's First Amended Complaint ("FAC") asserts claims for relief against defendants Neovasc, Inc. ("Neovasc") and its wholly-owned subsidiary, Neovasc Tiara, Inc. ("Neovasc Tiara"), for 1) correction of inventorship, 2) breach of contract, 3) breach of implied covenant of good faith and fair dealing, 4) fraud, 5) misappropriation of trade secrets and 6) unfair and deceptive trade practices.

Pending before the Court is defendants' motion to dismiss the claims for correction of inventorship, fraud and unfair and deceptive trade practices from the FAC. For the reasons that

follow, the motion will be allowed, in part, and denied, in part.

**III. Background**

CardiaQ is a medical device company founded by Dr. Arshad Quadri ("Dr. Quadri") that aims to develop and commercialize cost-effective catheter-based heart valve replacement systems. Its platform technology is a Transcatheter Mitral Valve Implantation ("TMVI") system designed to be an alternative to open-chest surgery for treating mitral regurgitation in the human heart.

As of 2005, prior to working on mitral valve replacements, Dr. Quadri worked extensively on developing an aortic valve replacement, or Transcatheter Aortic Valve Implantation ("TAVI") system. He continued to work on numerous iterations of the TAVI system after founding CardiaQ and establishing its principal place of business in Winchester, Massachusetts.

Building on the research in developing the TAVI system, plaintiff initiated its work on the TMVI system in August, 2008. By April, 2009, CardiaQ began to file patent applications to protect the intellectual property that it developed, and was developing, concerning certain aspects of the TMVI technology.

Plaintiff alleges that, among other inventions, Dr. Quadri and J. Brent Ratz ("Mr. Ratz"), CardiaQ's President and Chief Operations Officer,

conceived of atrial and ventricular anchoring suitable for a mitral valve prosthetic to engage a portion of the mitral valve from an atrial side of the valve annulus and to engage a portion of the valve from a ventricular side of the valve annulus, as well as a deployment method for such anchoring.

Dr. Quadri and Mr. Ratz each assigned their respective ownership interests in these inventions to CardiAQ.

In June, 2009, CardiAQ received an unsolicited email from Brian McPherson ("Mr. McPherson"), the Vice President of Operations and President of the Surgical Products division at Neovasc, offering Neovasc's biologic tissue materials and associated development and manufacturing services to CardiAQ. The email and the company introduction presentation attached to it represented that Neovasc viewed its customers as industry partners. They also represented that Neovasc's core products were "implantable pericardial tissue technologies" and the "Reducer™ stent for refractory angina."

Neovasc and CardiAQ executed a Non-Disclosure Agreement ("NDA") later that month and in July, 2009, CardiAQ signed a Purchase Order for Neovasc to perform certain services involving the assembly of heart valves in accordance with CardiAQ's TMVI technology. CardiAQ then began disclosing various aspects of its confidential and proprietary TAVI and TMVI technology to its primary points of contact at Neovasc, Mr. McPherson and Randy Matthew Lane ("Mr. Lane"). The disclosures included the

inventions by Dr. Quadri and Mr. Ratz described above as well as designs, drawings, frames and specifications for successful and unsuccessful devices that CardiaQ developed through its own research.

In February, 2010, CardiaQ transferred its principal place of business to Irvine, California. It notified Neovasc that soon it would no longer need an outside valve manufacturer. From July, 2009 through April, 2010, Neovasc assembled more than ten valves for CardiaQ pursuant to the parties' written Purchase Order contract and under the confidentiality restrictions of the NDA.

At no point during the parties' business relationship did Neovasc disclose that it intended to develop its own TMVI technology or any form of competing mitral valve product. In May, 2010, Neovasc filed its first U.S. patent application covering TMVI technology, listing only Neovasc personnel as inventors. CardiaQ was unaware of the patent application until January, 2012. On November 12, 2013, the United States Patent and Trademark Office issued U.S. Patent No. 8,579,964 ("the '964 Patent") to Neovasc. The '964 Patent allegedly discloses various aspects of CardiaQ's TMVI technology, including the inventions by Dr. Quadri and Mr. Ratz. In February, 2014, CardiaQ learned through a public statement by Neovasc that

Neovasc had begun developing its transcatheter mitral valve in 2009.

**IV. Procedural history**

Plaintiff filed its complaint in June, 2014. The following month, Neovasc moved to transfer the case and to dismiss CardiAQ's claims for correction of inventorship, fraud and unfair and deceptive trade practices. In August, 2014, CardiAQ filed an amended complaint and defendants subsequently moved to dismiss the same three claims. This Court denied defendants' motion to transfer venue in October, 2014. It heard oral argument on defendants' motion to dismiss the following month.

**V. Defendants' motion to dismiss**

**A. Legal standard**

To survive a motion to dismiss, a complaint must contain sufficient factual matter, accepted as true, to "state a claim to relief that is plausible on its face." Bell Atl. Corp. v. Twombly, 550 U.S. 544, 570 (2007). The Court must accept all factual allegations in the complaint as true and draw all reasonable inferences in the plaintiff's favor. Langadinos v. Am. Airlines, Inc., 199 F.3d 68, 69 (1st Cir. 2000). The Court, however, need not accept legal conclusions as true. Ashcroft v. Iqbal, 129 S. Ct. 1937, 1949 (2009). Threadbare recitals of the legal elements, supported by mere conclusory statements, do not suffice to state a cause of action. Id. Accordingly, a

complaint does not state a claim for relief where the well-pled facts fail to warrant an inference of any more than the mere possibility of misconduct. Id. at 1950.

**B. Application**

**1. Correction of inventorship**

Plaintiff alleges that Dr. Quadri and Mr. Ratz were wrongfully omitted as inventors of the '964 Patent because, among other reasons, Claim 1 of the patent discloses "inventions conceived and/or jointly invented" by them. The only named inventors of the '964 Patent, however, are Mr. Lane and Colin A. Nyuli of Neovasc.

Although the named inventors in an issued patent are presumed to be true, correction of inventorship is allowed whenever "through error an inventor is not named in an issued patent." 35 U.S.C. § 256(a); Hess v. Adv. Cardiovascular Sys., Inc., 106 F.3d 976, 980 (Fed. Cir. 1997). Under Section 256,

[t]he court before which such matter is called in question may order correction of the patent on notice and hearing of all parties concerned and the Director shall issue a certificate accordingly.

35 U.S.C. § 256(b).

The Court held a hearing on the defendants' motion to dismiss on November 5, 2014 and took the matter under advisement. It now concludes that the plaintiff has failed to

plead sufficient facts to survive the motion to dismiss its claim for the correction of inventorship.

**i. Sole inventorship**

The assignment of inventorship requires "nothing more than determining who conceived the subject matter at issue." Sewall v. Walters, 21 F.3d 411, 415 (Fed. Cir. 1994). Conception is therefore "the touchstone of inventorship." Burroughs Wellcome Co. v. Barr Labs., Inc., 40 F.3d 1223, 1227 (Fed. Cir. 1994).

It exists only when

a definite and permanent idea of an operative invention, including every feature of the subject matter sought to be patented," is formed in the mind of the inventor.

Sewall 21 F.3d at 415.

To the extent that CardiAQ is alleging that Dr. Quadri and Mr. Ratz should be the only named inventors of the '964 Patent, plaintiff must ultimately prove that they conceived every element of every claim in the patent. Ethicon, Inc. v. U.S. Surgical Corp., 135 F.3d 1456, 1460 (Fed. Cir. 1998). CardiAQ has not, however, made an allegation that Dr. Quadri and Mr. Ratz conceived every element of every claim and therefore it has not sufficiently pled that they should hold sole inventorship of the '964 Patent.

**ii. Joint inventorship**

In order to qualify as a joint inventor, "[a] person must contribute to the conception of the claimed invention." Eli Lilly & Co. v. Aradigm Corp., 376 F.3d 1352, 1359 (Fed. Cir. 2004). Furthermore,

there must be some element of joint behavior, such as collaboration or working under common direction, one inventor seeing a relevant report and building upon it or hearing another's suggestion at a meeting.

Kimberly-Clark Corp. v. Procter & Gamble Distrib. Co., 973 F.2d 911, 917 (Fed. Cir. 1992).

Collaboration and joint behavior has always been a "primary focus" of joint inventorship. Vanderbilt Univ. v. ICOS Corp., 601 F.3d 1297, 1303 (Fed. Cir. 2010). While neither contributor has to conceive the entire invention, "[t]he interplay between conception and collaboration requires that each co-inventor engage with the other co-inventors to contribute to a joint conception." Id. Joint inventors need not, however, physically work together or at the same time, make the same type or amount of contribution or make a contribution to the subject matter of every claim in the patent. 35 U.S.C § 116(a).

Defendants contend that the correction of inventorship claim should be dismissed because plaintiff has failed to plead specific facts supporting its alleged contribution to the conception of the invention. In particular, they assert that

CardiAQ has not identified the subject matter allegedly conceived jointly, who was involved or how the alleged inventions by Dr. Quadri and Mr. Ratz relate to the claims of the '964 Patent.

CardiAQ responds that its joint inventorship claim should survive the motion to dismiss because its allegations of the disclosure of the inventions by Dr. Quadri and Mr. Ratz and the subsequent appearance of those inventions in the '964 Patent are sufficient to demonstrate joint inventorship.

Even accepting CardiAQ's assertions as true, the Court concludes that plaintiff has not pled the required elements for a claim for joint inventorship because it has not alleged any collaboration or joint efforts toward the development of the invention published in the '946 Patent. Defendants' motion to dismiss the claim for correction of inventorship will therefore be allowed.

## **2. Fraud**

CardiAQ alleges that defendants committed fraud by making false representations that caused harm to the plaintiff. The elements common law fraud in Massachusetts are 1) a false representation of a material fact, 2) made with knowledge of its falsity, 3) for the purpose of inducing a party to act thereon and 4) that the party relied upon the representation as true and

acted upon it to its detriment. Slaney v. Westwood Auto, Inc., 366 Mass. 688, 703 (1975).

A party making an allegation of fraud "must state with particularity the circumstances constituting fraud or mistake." Fed. R. Civ. P. 9(b). To satisfy this requirement for particularity

the pleader usually is expected to specify the who, what, where and when of the allegedly false or fraudulent representation.

Alternative Sys. Concepts, Inc. v. Synopsys, Inc., 374 F.3d 23, 29 (1st Cir. 2004). In other words, Rule 9(b) requires the pleader 1) to specify the allegedly fraudulent statements, 2) to identify the speaker, 3) to plead when and where the statements were made and 4) to explain what made the statements fraudulent. Republic Bank & Trust Co. v. Bear Stearns & Co., 683 F.3d 239, 247 (6th Cir. 2012).

Defendants contend that CardiaQ has failed to plead with particularity because the FAC doesn't specify the "who," "where" or "when" of the fraud allegation. The Court disagrees. CardiaQ's FAC alleges that, in the email and attachment sent by Mr. McPherson in June, 2009, Neovasc falsely represented its products and that it would treat CardiaQ as a partner. Plaintiff also alleges that Neovasc falsely represented that it would protect the confidentiality of CardiaQ's technology in the NDA executed by the parties later that month. CardiaQ maintains

that those representations were fraudulent because Neovasc intended to induce the disclosure of CardiAQ's confidential information and to use that information to develop its own competing mitral valve product. Those allegations satisfy the requirement for pleading with particularity.

Defendants also contend that CardiAQ has failed to plead two of the elements of the fraud claim. In particular, they aver that CardiAQ has not alleged facts showing that the purported fraudulent statements were false when made or that Neovasc had knowledge of their falsity.

Taking all factual allegations in the FAC as true, the Court concludes that CardiAQ has sufficiently pled the elements of the claim to survive the motion to dismiss. The FAC alleges that Neovasc knew "at all times" that it intended to compete with CardiAQ by developing its own mitral valve product. While such an allegation does not necessarily undermine the truthfulness of Neovasc's product representations, it suggests that Neovasc knew that it was falsely claiming that it would treat CardiAQ as a partner and that it would maintain the confidentiality of CardiAQ's disclosures. Fact discovery will either bolster or undermine these allegations.

Accordingly, defendants' motion to dismiss the fraud claim in the FAC will be denied.

**3. M.G.L. c. 93A**

Chapter 93A prohibits those engaged in trade or commerce from employing "unfair methods of competition and unfair or deceptive acts or practices." M.G.L. c. 93A, § 2. The statute provides a territorial limitation such that actions brought under Chapter 93A can be maintained only if the alleged unfair and/or deceptive acts "occurred primarily and substantially within the commonwealth." M.G.L. c. 93A, § 11.

The "primarily and substantially" inquiry under Chapter 93A is "fact intensive and unique to each case" and cannot be "based on a test identified by any particular factor or factors."

Kuwaiti Danish Computer Co. v. Digital Equip. Corp., 438 Mass. 459, 472-73 (2003). Courts have therefore frequently held that challenges to the "primarily and substantially" requirement are not ripe for adjudication at the motion to dismiss stage. See, e.g., Berklee Coll. of Music, Inc. v. Music Indus. Educators, Inc., 733 F. Supp. 2d 204, 213 (D. Mass. 2010) ("Due to the fact-finding process necessarily involved in evaluating the [primarily and substantially] issue, this particular ground for challenging a c. 93A claim—absent some extraordinary pleading concession by a claimant—cannot be resolved on Rule 12 motions") (citation and internal quotations omitted); Workgroup Tech. Corp. v. MGM Grand Hotel, LLC, 246 F. Supp. 2d 102, 118 (D. Mass. 2003) ("Since a Court does not make [factual] findings

when ruling on a motion to dismiss, it would seem that a motion to dismiss is no longer an appropriate vehicle for raising the [primarily and substantially] issue").

Moreover, CardiAQ has sufficiently pled its Chapter 93A claim to survive a "primarily and substantially" challenge because it alleges that the conduct giving rise to the Chapter 93A claim and the resulting injury occurred while its principals were located in Massachusetts. The FAC alleges that Neovasc breached the NDA, misappropriated trade secrets and fraudulently induced CardiAQ to share confidential and proprietary information beginning in 2009. CardiAQ did not relocate its principal place of business from Massachusetts to California until February, 2010. Whether those allegedly unfair and/or deceptive acts meet the standard of having occurred "primarily and substantially" within Massachusetts is a question to be addressed after discovery.

Defendants' motion to dismiss plaintiff's claim under M.G.L. c. 93A will therefore be denied.

**ORDER**

Accordingly, defendants' motion to dismiss (Docket No. 38) is, with respect to plaintiff's claim for correction of inventorship, **ALLOWED**, but is, with respect to plaintiff's claims for fraud and unfair and deceptive trade practices, **DENIED**.

**So ordered.**

/s/ Nathaniel M. Gorton  
Nathaniel M. Gorton  
United States District Judge

Dated November 6, 2014